

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation

**Federal Aviation
Administration**

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<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts Principal Maintenance Inspectors in FAA's FSDOs, and you, owners, operators, and repair facilities of **Porsche PFM 3200 series engines** of the importance of propeller gearbox inspections. This SAIB also advises you to strictly follow the prescribed oil change intervals, use only Porsche-approved oils, and not operate the engine outside the oil temperature operating limits. An engine in-flight shutdown (IFSD) can occur if the gearbox drive shaft fails due to improper maintenance or improper engine operation.

Affected Products

Manufacturer	Model
Porsche	PFM 3200 N01 and N03

Background

Investigation of a Moony M20L aircraft forced landing incident caused by a PFM 3200 engine IFSD indicated the propeller gearbox was seriously damaged due to corrosion pitting on the gear wheel and drive shaft teeth.

According to information from Porsche, this damage might have been caused by the use of unapproved gear oils, incorrect oil change intervals, or excessive oil temperature. The Luftfahrt-Bundesamt (LBA), which is the aviation authority for Germany, approved a mandatory gearbox inspection using Porsche

Service Bulletin (SB) No: N / 300-38 R1, dated January 23, 2003. The LBA concluded that repetitive gearbox inspection and proper engine maintenance should prevent gearbox corrosion pitting which could lead to serious gearbox gear damage and IFSD during critical flight phases. The FAA concurs with the LBA that improper maintenance was the root cause of gearbox failure.

Recommendations

We recommend you inspect the propeller gearbox using Porsche SB No. N / 300-38 R1, dated January 23, 2003. We also recommend you strictly follow the engine manuals for approved oils, oil change intervals, oil temperature operating limits, and gearbox maintenance.

For Further Information Contact

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